

(C) Substantial: (1) removal of lockout devices shall necessitate excessive force or unusual techniques; (2) tagout devices shall be: substantial enough to prevent inadvertent removal; of a non-reusable type; attachable by hand; self-locking; non-releasable with a minimum unlocking strength of no less than 50 pounds and having the general design and basic characteristics of being at least equivalent to a one-piece, all environment-tolerant nylon cable tie.

(D) Identifiable: Lockout and tagout devices shall indicate the identity of the employee applying the device(s).

- (iii) Tagout devices shall warn against hazardous conditions by legends such as: DO NOT START, DO NOT OPEN, DO NOT CLOSE, DO NOT ENERGIZE, DO NOT OPERATE.

(6) *Periodic inspections*

- (i) The employer shall, at least annually, inspect for compliance with this standard. The inspection shall: (A) be performed by an authorized employee other than the employee using the procedure being inspected; (B) be designed to correct any deviations or inadequacies observed; (C) review with employees who lock out equipment their responsibilities for lockout; (D) review with employees who tag out equipment their responsibilities for tagout.
- (ii) The employer shall certify that the periodic inspections have been performed and such certification shall: identify the subject machinery, the date of inspection, employees included and the person who performed the inspection.

(7) *Training and communication*

- (i) The employer shall provide training to ensure employees understand the purpose and function of the program and have the knowledge and skills for safe implementation of the program. The training shall include: (A) (for authorized employees) recognition of all hazardous energy sources, the type and magnitude of energy in the workplace, and the methods and means for isolating and controlling it; (B) (for affected employees) purpose and use of the procedure; (C) (for other employees) the procedure and prohibitions against attempting to restart locked/tagged equipment.
- (ii) When tagout systems are used employees shall be trained in these limitations: (A) tags are warning devices rather than restraining devices; (B) a tag must not be bypassed, ignored or defeated and must only be removed by the authorized person using it; (C) a tag must be legible and understandable; (D) tags and their means of attachment must withstand the environment; (E) a tag may create a false sense of security and is only part of the overall program; (F) a tag must be securely attached.
- (iii) Employee retraining: (A) retraining shall be provided when there is a change in: job assignment; machines, equipment or process that presents a new hazard; or energy control procedures; (B) additional retraining shall be provided when the periodic inspection reveals a need or whenever the employer has reason to believe the need exists; (C) retraining shall reestablish proficiency and introduce new or revised control methods.
- (iv) The employer shall certify that employee training has been accomplished and kept up to date.
- (8) *Energy isolation.* The program shall be implemented by an authorized employee.
- (9) *Notification of employees.* The employer or authorized employee shall notify affected employees before application and after removal of a lockout or tagout device.

29 CFR 1910.147(d)—*Application of control.* The established procedure shall include the following elements in the following sequence:

- (1) *Preparation for shutdown.* Before shutdown, the authorized employee shall know the type and magnitude of the energy hazards and the methods and means of control.
- (2) *Machine or equipment shutdown.* Shutdown shall follow the procedures of this standard.
- (3) *Machine or equipment isolation.* All energy isolation devices shall be physically located and operated.
- (4) *Lockout/tagout device application*
- (i) Lockout/tagout devices shall be affixed by an authorized employee.
- (ii) Lockout devices shall hold the energy isolating device in a *safe* or *off* position.
- (iii) Tagout devices shall be affixed so as to prohibit moving the energy isolating device from its *safe* or *off* position.
- (A) if the energy isolating device could be locked out but tagout is used, the tag shall be located where the lock would be attached;